Land Use Concepts
for the
Tower Automotive Site

Prepared for :

Tower Automotive

and the

City of Milwaukee

January 2003

Planning and Design Institute, Inc

TABLE OF CONTENTS

SITE DESCRIPTION

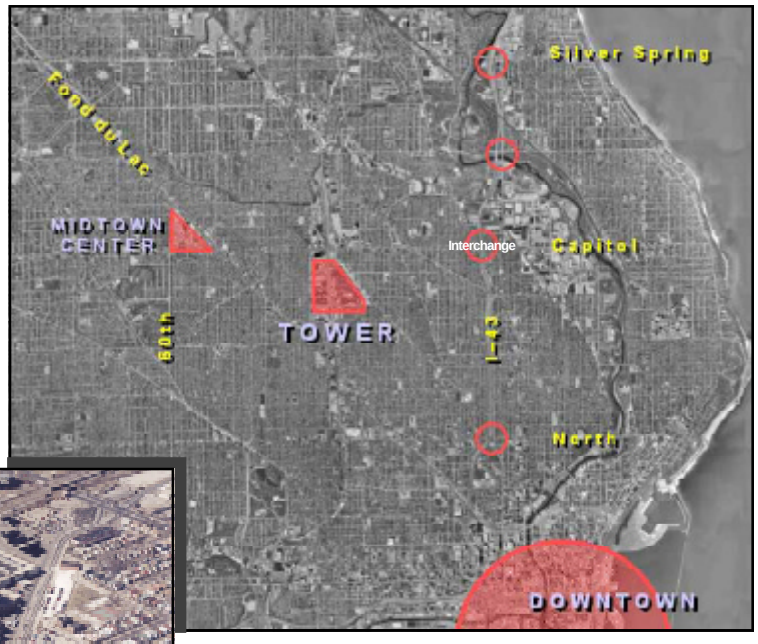
The Tower Automotive Site

- The entire Tower site is 148+ acres in size and served by an excellent transportation network including rail access. It is bounded by Capitol Drive on the north, Townsend on the south, 35th on the west, and Hopkins on the east with outlying parking lots beyond these streets.

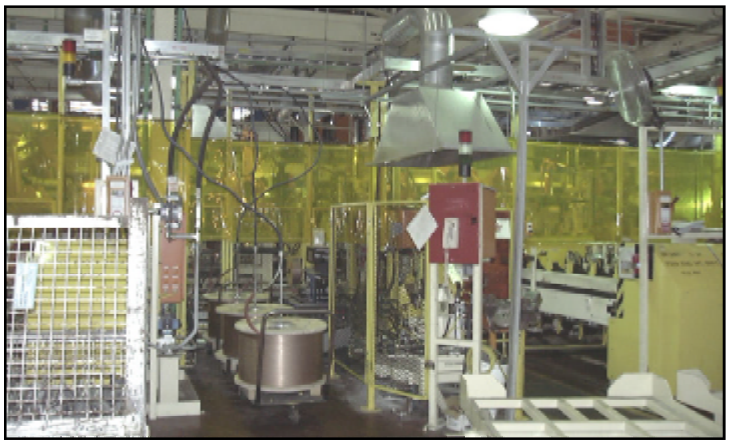
- Facilities are currently being used for the engineering and manufacturing of truck frames.

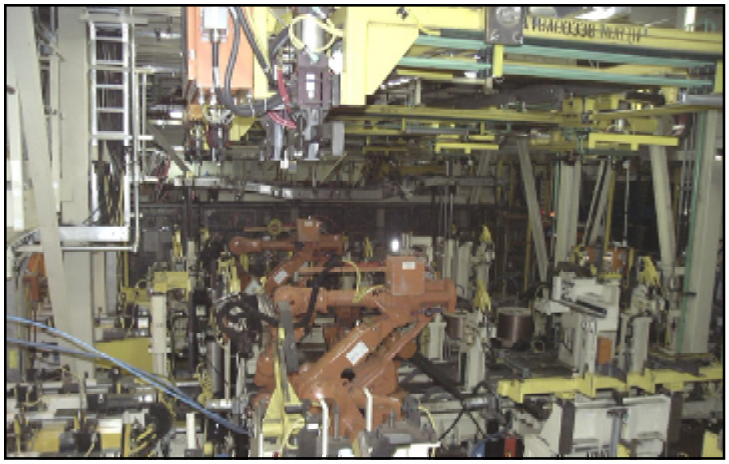
- Opportunity to create a modern, urban industrial campus on the site while also revitalizing the surrounding neighborhood.

Above: Existing Tower Automotive facilities
Below: Location of Tower Automotive facilities within the City



Aerial view of Tower Automotive facilities





High-tech Tower facilities

SITE DESCRIPTION

Existing Uses

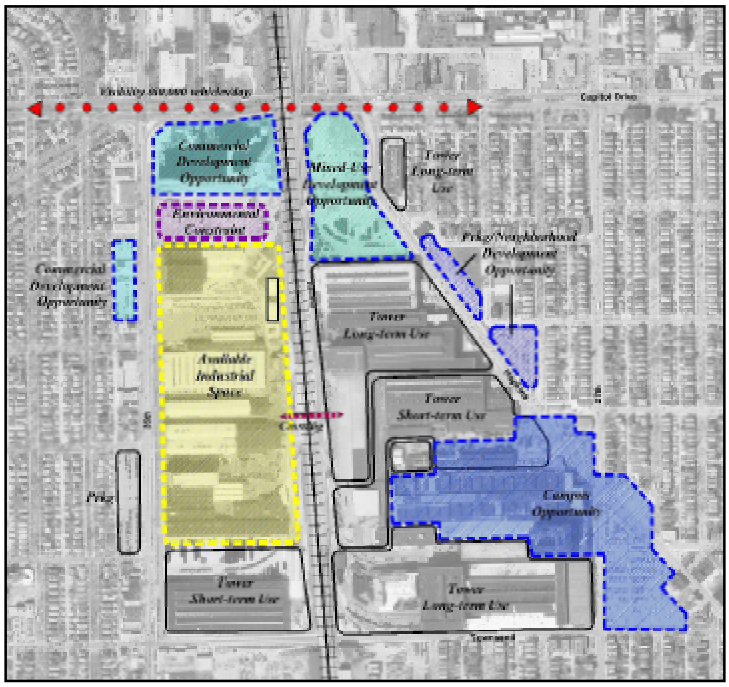
The diagram to the right illustrates the existing uses and conditions on the site.

- The dark green areas show facilities that will remain Tower engineering and manufacturing long-term (possibly 7+ years).
- Technologies include hydro-forming, laser technologies, and robotics. The light green represents short-term Tower facilities (possibly 2+ years).
- The yellow areas are available for immediate use, however, the area within the dashed yellow line is intended to remain in industrial use.
- Existing parking lots are shown in blue.

Opportunities

- The northern portion of the site, shown in light blue at the right, has high potential for commercial or mixed-use activity due to the high visibility and traffic count along Capitol Drive.
- The dark blue areas illustrate potential near-term campus (including buildings 65 and 1A) or neighborhood uses. The opportunity for University expansion options on the Tower site are numerous and flexible.

Above: Existing use of the Tower site
Below: Future site opportunities



SITE DESCRIPTION

Campus Identity

Buildings 65 and 1A on the Tower site are available for immediate lease. Together these buildings and the immediate surroundings promote an historic campus image. These buildings could serve as the beginning of a higher learning or business campus.

Building 1A
(Two-story brick office building)
This building could serve administrative needs and possibly student union activities. The traditional character of this building reinforces a campus setting.

Building 65 -Research and Engineering
(Seven-story office building)
This historic Art Deco building, designed by Holabird and Root Architects was originally used for the purpose of research and engineering for the A.O. Smith Corporation. It is a seven story building that contains large interior gathering spaces, and currently multiple T1 lines and fiber optics. The key considerations in designing the building included maximizing light and air while ensuring stable construction necessary for accurate reading of delicate instruments and setting of machinery. Also critical was providing flexibility of the plan and arrangement of equipment. Therefore, no permanent partitions were built except in the service areas of the building.

The entrance lobby in Building 65 is almost entirely of buff and satin finish aluminum in fluted and paneled forms, black enameled steel, and dark blue-green Formica panels. The floor in the lobby is terrazzo set in metal strips.

Building 65 (Research and Engineering) interior spaces

NEIGHBORHOOD CONTEXT

Tower Neighborhood

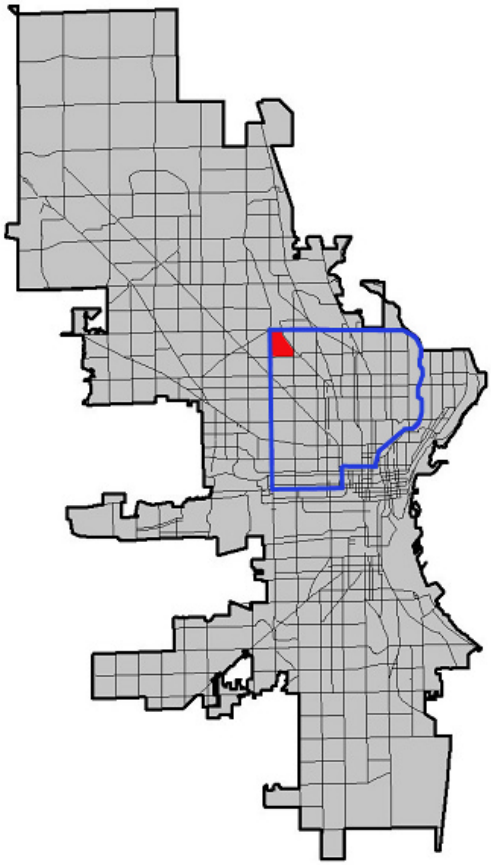
- $42,900 Average Assessed Value
- 69% Owner-occupancy

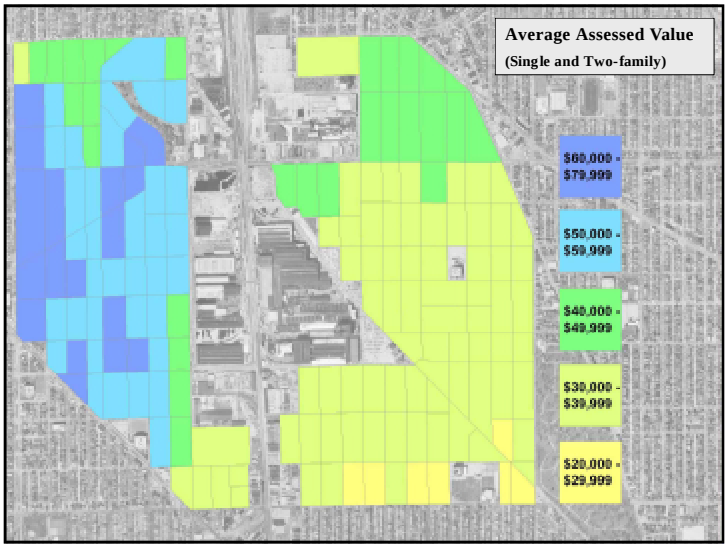
Central City (as defined in blue on the City map below)

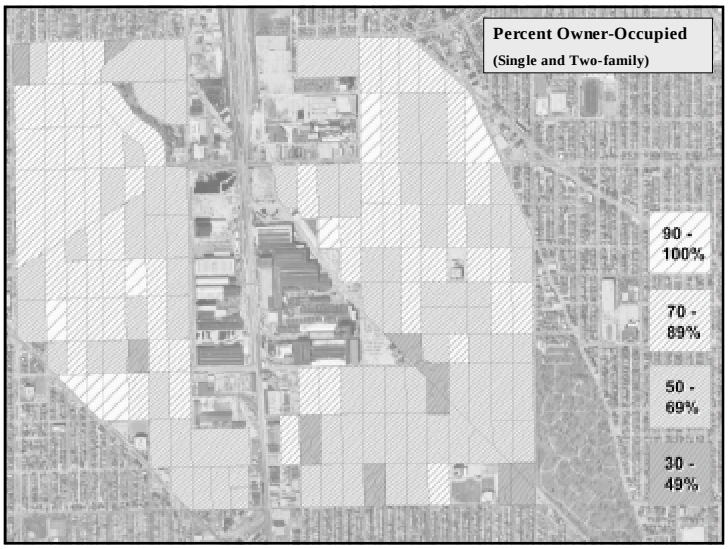
- $35,200 Average Assessed Value
- 58% Owner Occupancy

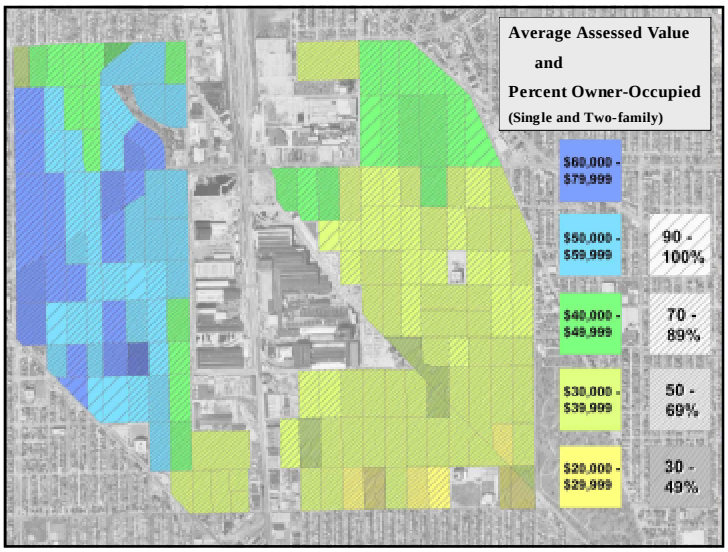
City of Milwaukee

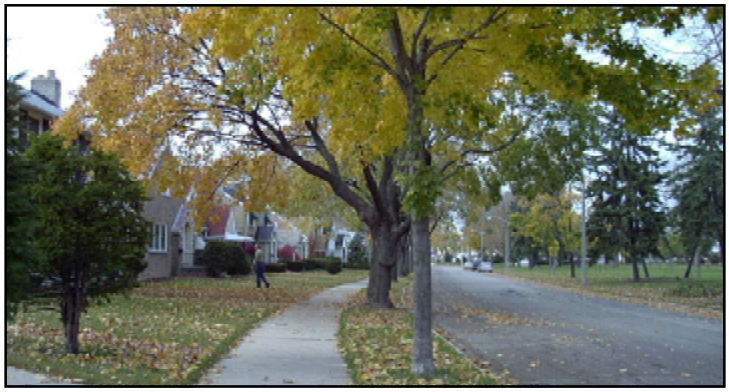
- $77,300 Average Assessed Value
- 79% Owner-occupancy











The photographs to the left illustrate some of the traditional residential streets surrounding the site.

The neighborhood surrounding the Tower site is a strong one.

- The average assessed value of the surrounding blocks (single and two-family) is $42,900. Though not as high as the City of Milwaukee ($77,300), it is considerably higher than what is defined as the Central City ($35,200).

- Owner-occupancy rates (single and two-family) are comparable. The Tower neighborhood is 69% owner occupied, while the City of Milwaukee is 79%, and the Central City is 58%.

- Though the area southeast of the Tower site has relatively lower property values, the west side of the neighborhood has considerably higher values.

- The addition of a campus setting and new commercial activity in the area could further stimulate the neighborhood.

SITE CONCEPTS

Site Diagram

The Urban Industrial Campus Site Diagram illustrates general recommendations for the Tower Automotive Site and immediate surroundings. The three plan concepts were developed based on the information in the Site Diagram. The following recommendations are consistent in all three concepts:

- With the high traffic counts (60,000+/day) along Capitol Drive, this high visibility on the north end of the site is well suited for some degree of commercial development. The concepts depict a high-quality business-retail campus on the northwest and northeast corners. This introduction of these uses on the site could help stimulate industrial and residential revitalization in and around the site.

- Currently, a great deal of parking for Tower Automotive exists across 35th, 27th and Hopkins Streets. The concepts introduce all of the industrial parking back onto the site, thereby making land available for neighborhood residential infill. Replacing parking lots with new housing will repair the urban fabric along the edges of the Tower site and also stimulate and revitalize the housing market through the concentration of new housing development.

- The urban industrial campus concept reintroduces the city grid into the site, dividing it into varying size parcels. Parking for industrial uses is located along these streets and additional parking is located on-site. Providing ample parking within the industrial sites allows redevelopment of the outlying parking lots in the neighborhood. Rail access to the industrial sites is maintained. Service areas are generally screened from public view behind buildings and/or significant landscaping.

- Where industrial uses meet the major streets: 35th, Townsend, 27th, and Hopkins, it is important to establish a well-landscaped, continuous street edge to fit in and enhance the surrounding neighborhood.

- The concepts include an office / institutional campus component that takes advantage of the synergies between higher learning and high-tech jobs. As an alternative, this area could also be developed as an industrial site.

Concept A

Many of the industrial buildings on the site are currently in use and are well-equipped high-tech facilities. Depending on future industry on the site, the existing buildings may or may not be useful. This concept depicts a condition whereby a combination of existing and new buildings form an industrial campus. The existing buildings that will remain depend on the nature and needs of future industry. A portion of on-site industrial parking is shared along the rail line. Sites are secured with ornamental fences and shrubs.

Concept B

This concept assumes that the entire site will be cleared prior to redevelopment. The main feature is the introduction of a well-landscaped greenway that runs the length of the site on both sides of the railroad. This greenspace amenity, typically available only in suburban industrial parks, softens the usual hardscape of the urban industrial campus.

Concept C

Concept C is also based on a cleared site. Similar to Concept B, greenways are also included, but service access is more efficiently located (and screened by landscaping) through the center of these greenways. Sites are secured with ornamental fences and shrubs.

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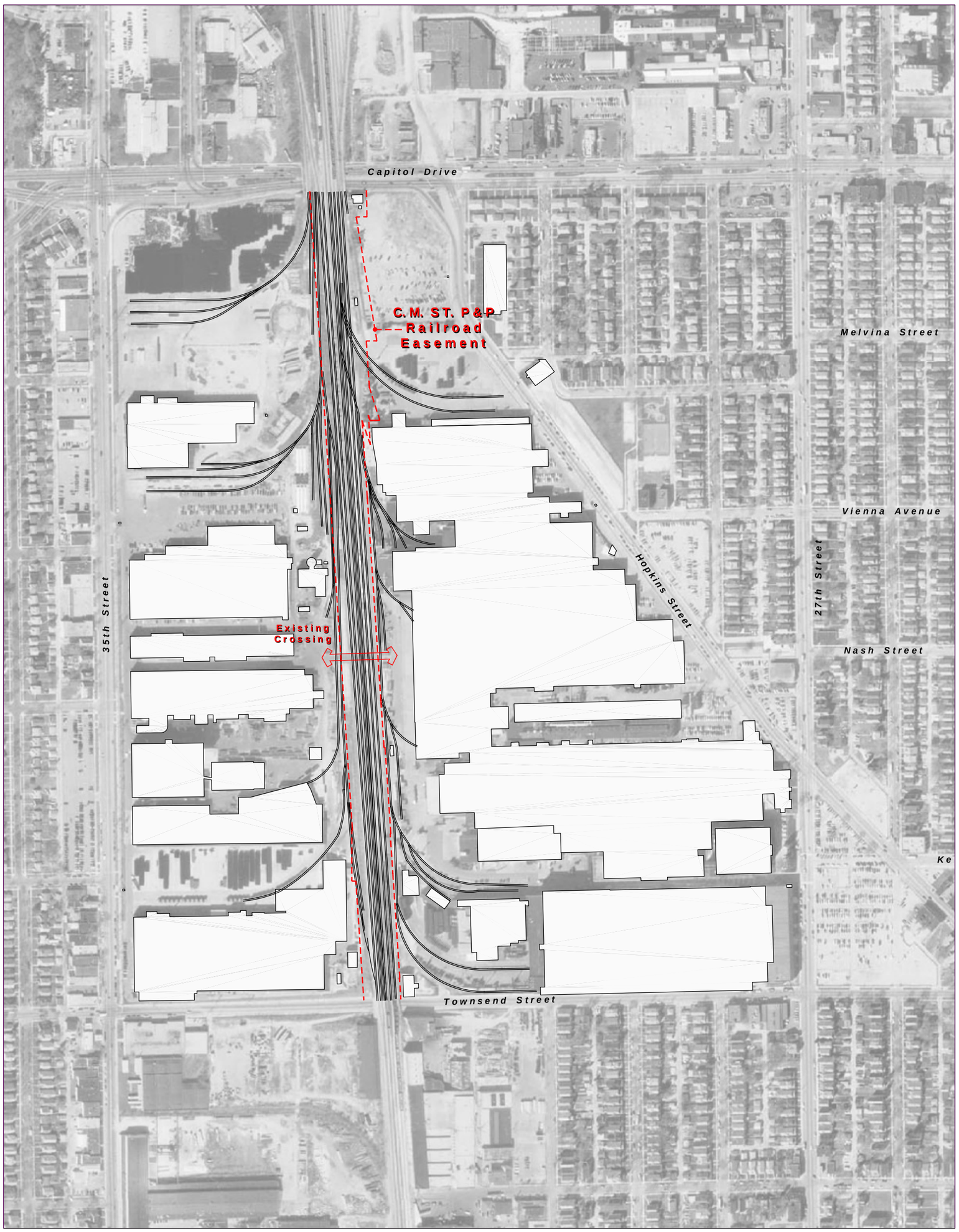
Tower Automotive
• Existing Conditions •

0ft. 250

November 2002



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Tower Automotive
• Existing Railroad Configuration •

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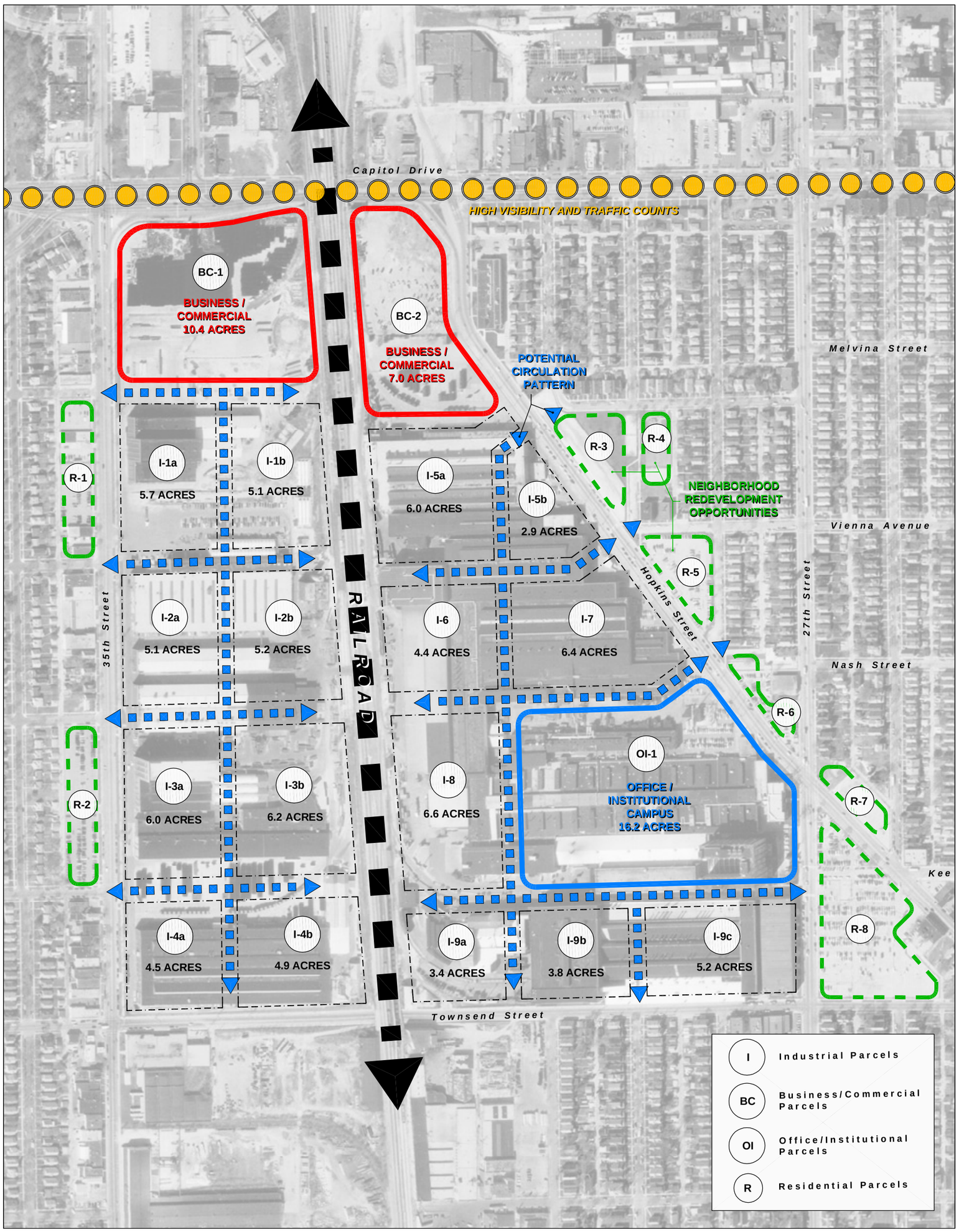

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Tower Automotive

• Urban Industrial Campus Site Diagram •

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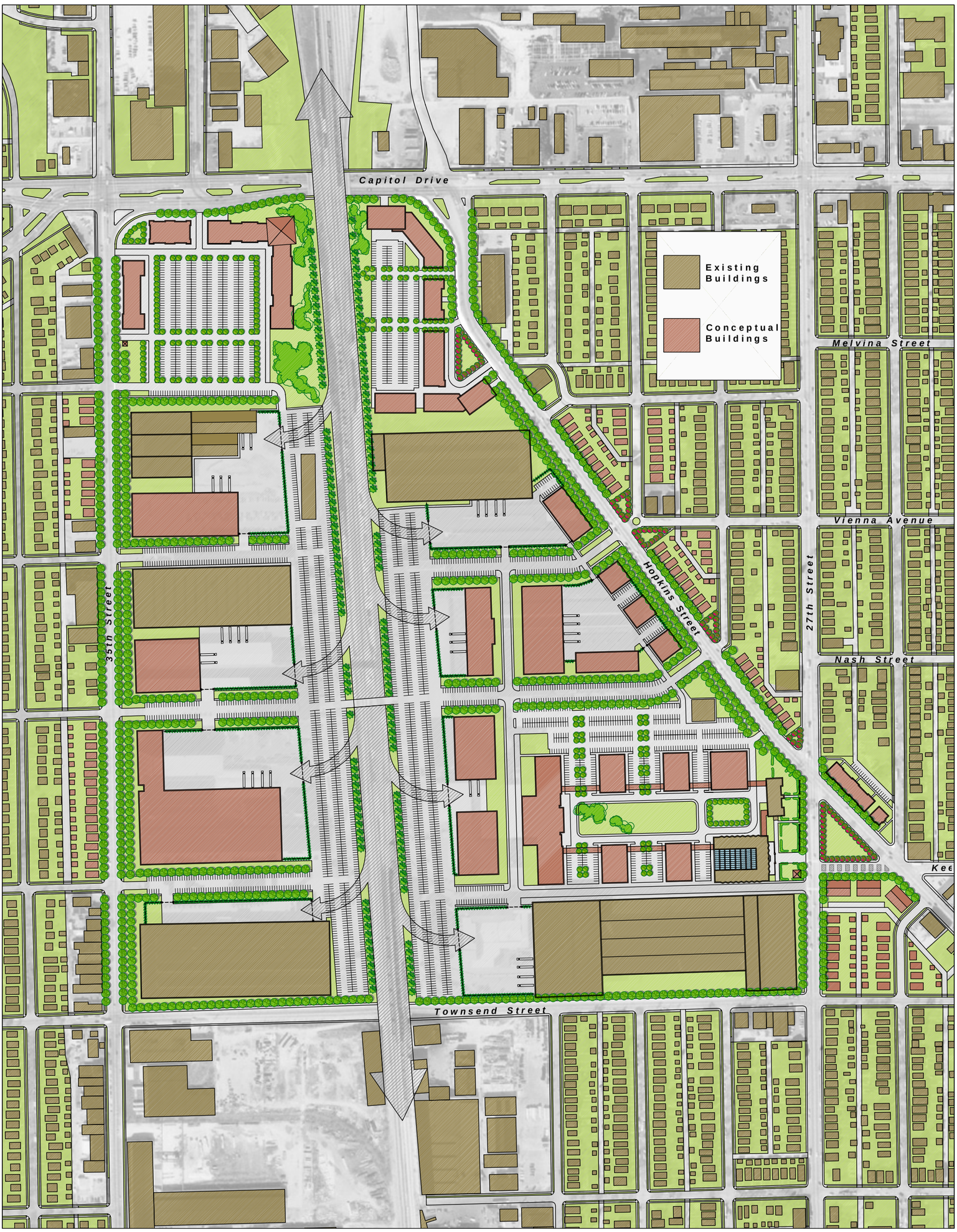

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Tower Automotive
• Urban Industrial Campus Concept A •

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Tower Automotive

• Urban Industrial Campus Concept A •

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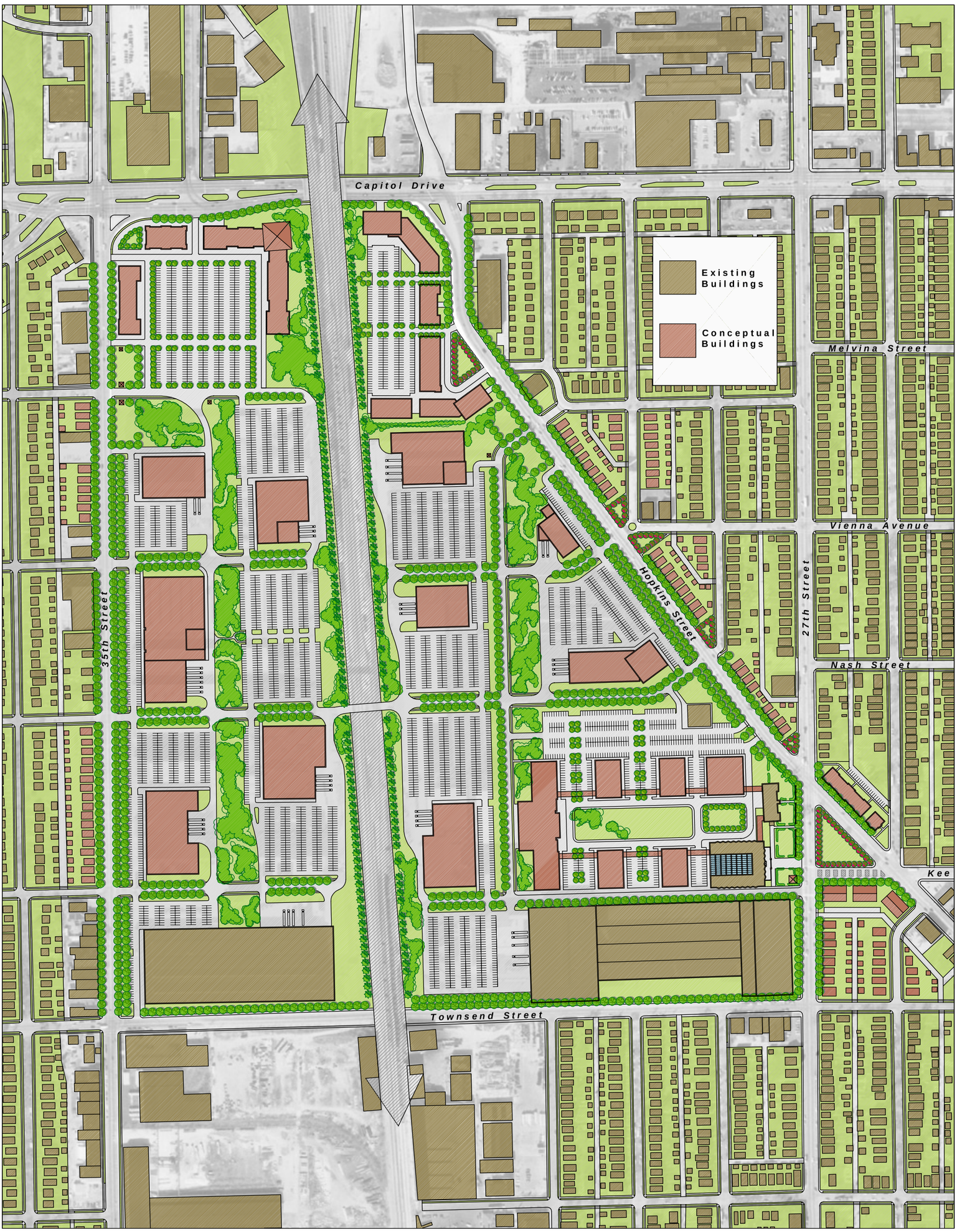

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Tower Automotive
• Urban Industrial Campus Concept B •

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Tower Automotive

• Urban Industrial Campus Concept B •

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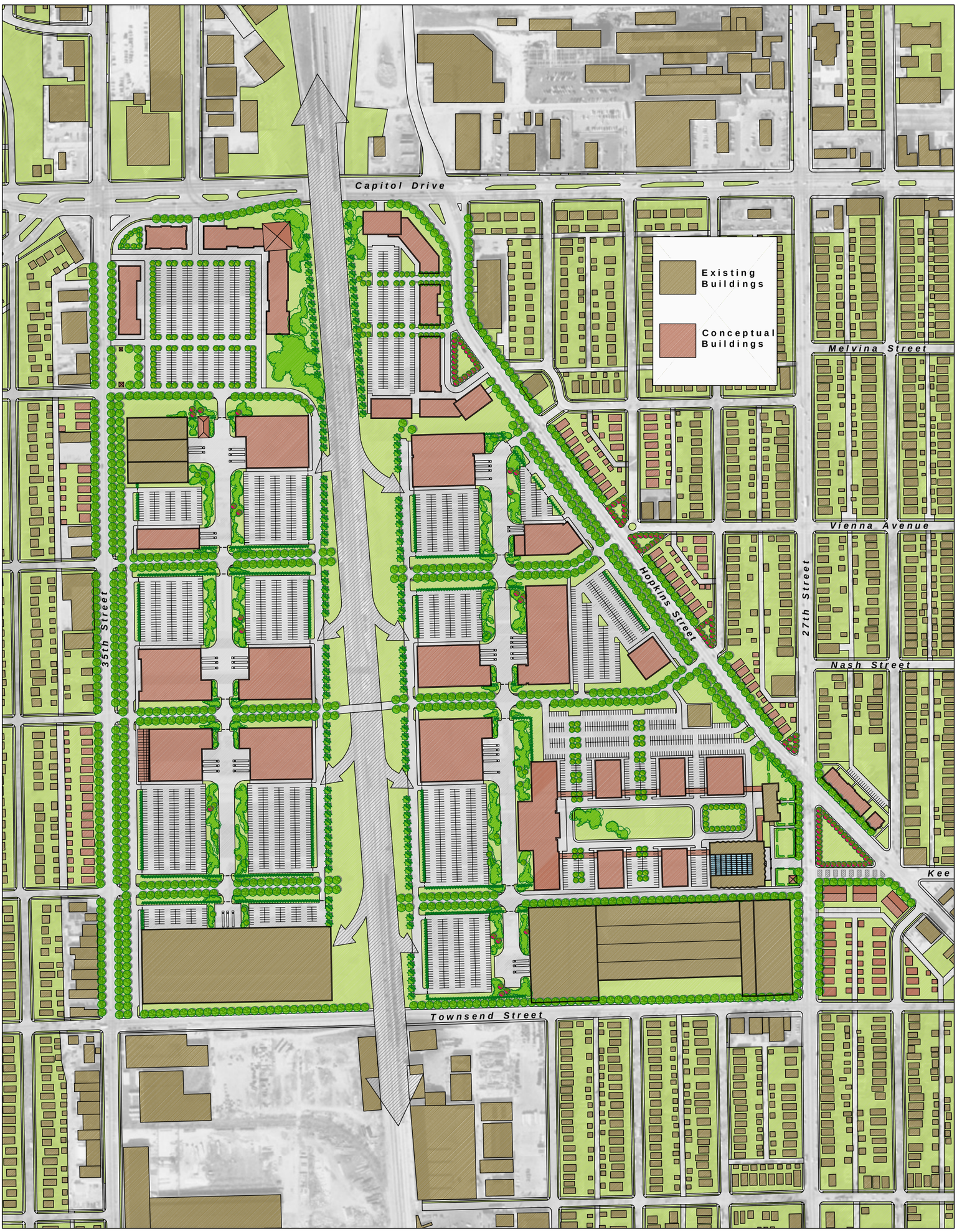

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Tower Automotive
• Urban Industrial Campus Concept C •

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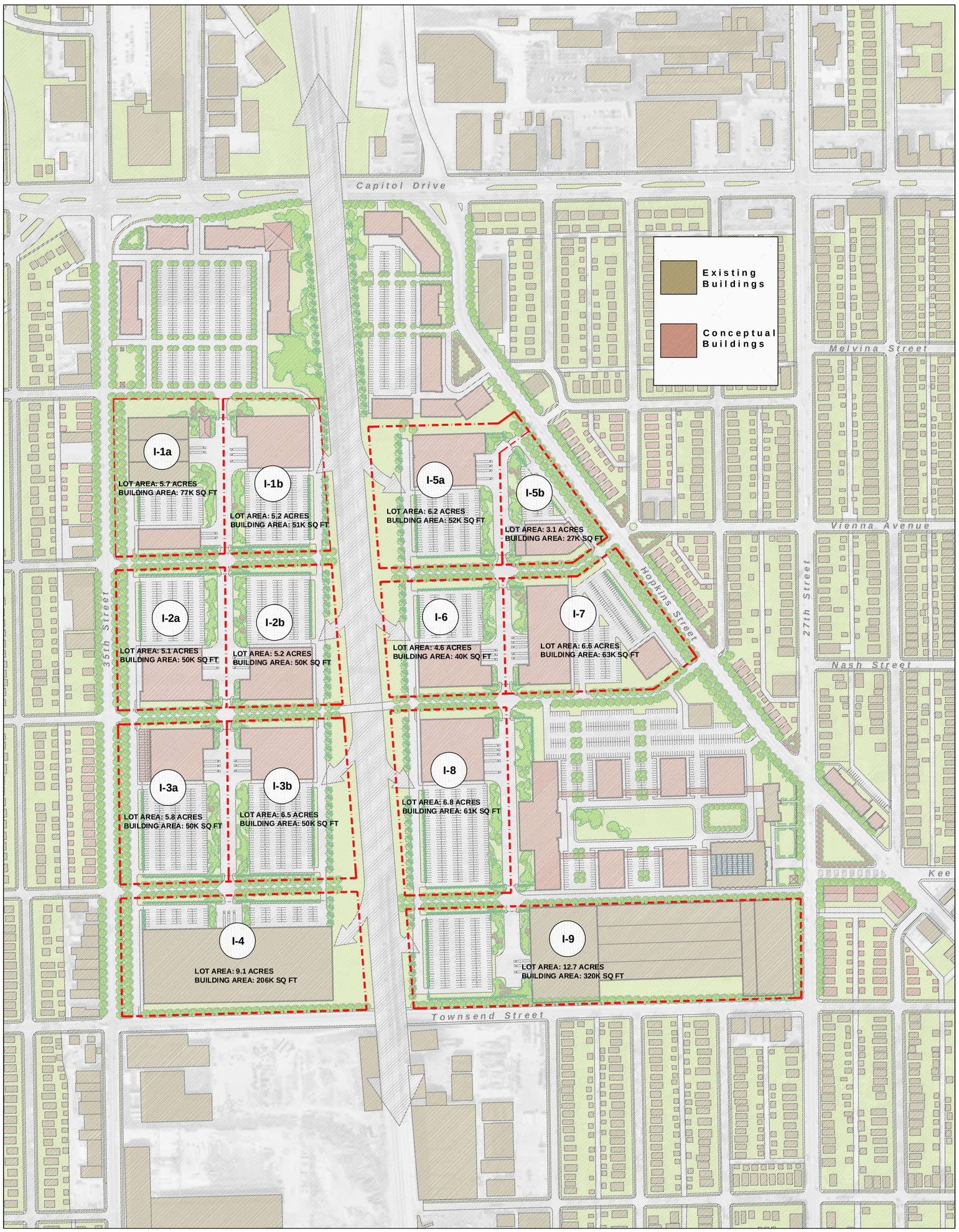

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Tower Automotive

• Urban Industrial Campus Concept C •

0ft. 250

November 2002

SITE CONCEPTS

These photos illustrate the potential of creating a university / business campus on the Tower site according to the site concepts on the previous pages.

Existing Conditions

Campus Triangle (Looking west toward Building 65)

This progression shows the development of the space in front of Building 65 and 1A as a commons. The addition of street amenities, new buildings and landscape create an attractive campus space. The commons could serve students, employees, as well as neighborhood residents and become a vibrant gathering place.

Existing Conditions

Capitol Drive (Looking West)

These images illustrate the potential view of the northeast corner of the Tower site from Capitol Drive.

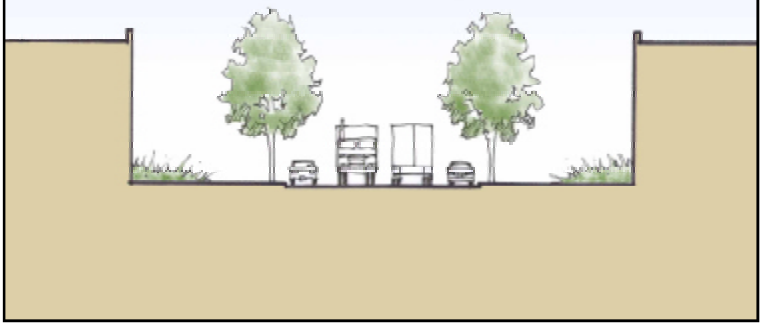
Over 60,000 vehicles travel this street each day. This extremely prominent corner offers an opportunity for a prominent office/retail development.

SITE CONCEPTS

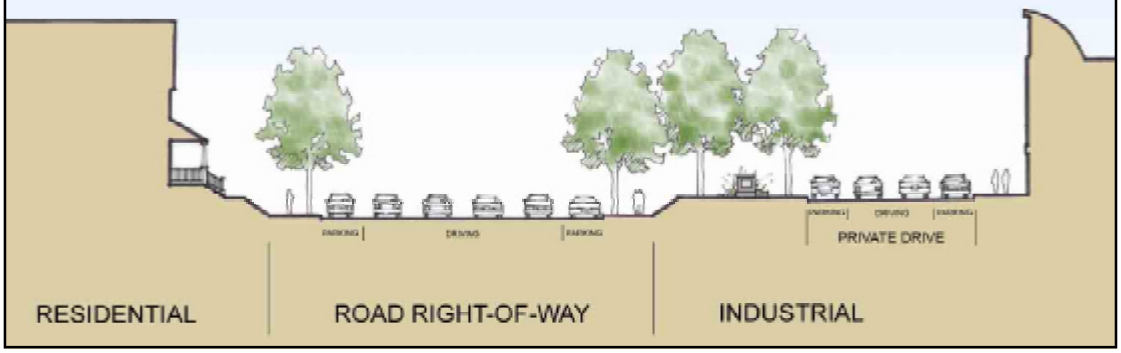
Street Sections

These street sections depict potential conditions as illustrated in the Site Concepts.

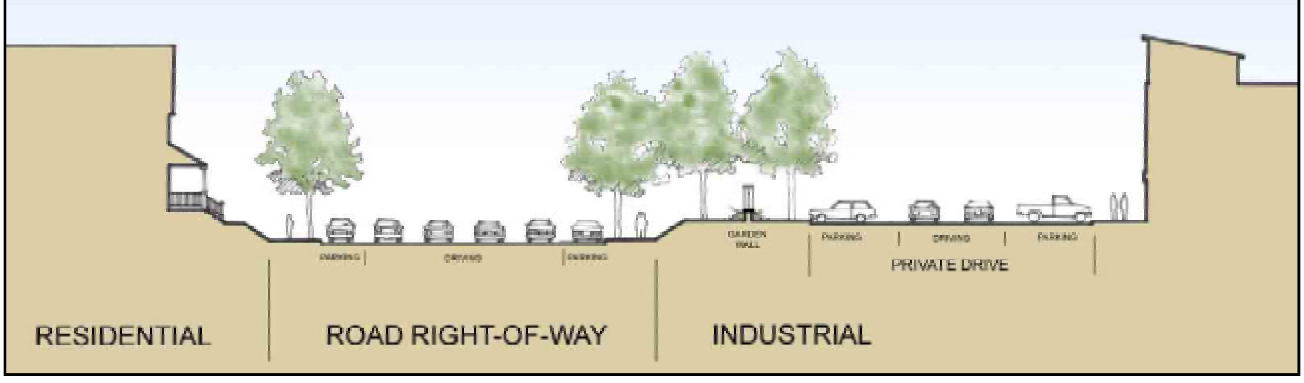
Typical internal industrial street



Concept C: Site Perimeter
(35th Street looking north)



Concept C: Site Perimeter
(35th Street looking north)



Business / Commercial

Existing Conditions			Concepts A, B, and C		
Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	Building Area (Sq Ft)
BC-1	10.4	-	BC-1	10.4	87,600
BC-2	7.0	-	BC-2	7.0	72,500
Total	**17.4**	-	Total	**17.4**	**160,100**

Office / Institutional

Existing Conditions			Concepts A, B, and C		
Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	Building Area (Sq Ft)
OI-1	**16.2**	**1,014,100**	OI-1	**16.2**	**537,500**

Residential Parcels

Existing Conditions			Concepts A, B, and C		
Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	New Residential Units
R-1	1.1	-	R-1	1.1	9
R-2	1.7	-	R-2	1.7	17
R-3	1.5	-	R-3	1.5	14
R-4	0.8	-	R-4	0.8	8
R-5	1.5	-	R-5	1.5	13
R-6	0.9	-	R-6	0.9	8
R-7	0.9	-	R-7*	0.9	32
R-8	3.2	-	R-8*	3.2	55
			*includes multi-family units		
Total	**11.6**	-	Total	**11.6**	**156**

Site Concept Profile

These tables list a quantitative profile of the existing conditions and the three development concepts: A, B, and C. Approximate information for all proposed uses includes parcel acreage, building footprint size per parcel, and total building footprint square footage per concept.

Industrial Parcels

Existing Conditions			Concept A			Concept B			Concept C		
Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	Building Area (Sq Ft)	Lot	Parcel Size (Acres)	Building Area (Sq Ft)
I-1 - I-4	52.2	1,077,000	I-1	10.2	162,000	I-1a	5.7	38,000	I-1a	5.7	77,000
				-	-	I-1b	5.0	44,000	I-1b	5.2	51,000
			I-2	9.6	187,000	I-2	10.2	100,000	I-2a	5.1	50,000
				-	-		-	-	I-2b	5.2	50,000
			I-3	11.7	176,000	I-3a	6.2	58,000	I-3a	5.8	50,000
				-	-	I-3b	6.0	61,000	I-3b	6.5	50,000
			I-4	9.1	206,000	I-4	9.1	206,000	I-4	9.1	206,000
I-5 - I-9	51.3	1,374,000	I-5	8.8	169,000	I-5a	5.9	52,000	I-5a	6.2	52,000
				-	-	I-5b	2.7	16,000	I-5b	3.1	27,000
			I-6	4.1	35,000	I-6	4.3	32,000	I-6	4.6	40,000
			I-7	6.0	97,000	I-7	6.3	43,000	I-7	6.6	63,000
			I-8	6.2	75,000	I-8	6.4	60,000	I-8	6.8	61,000
			I-9	12.7	320,000	I-9	12.7	320,000	I-9	12.7	320,000
			Parcels	**78.4**		Parcels	**80.5**		Parcels	**82.6**	
			R.O.W.	25.1		R.O.W.	23		R.O.W.	20.9	
Total	**103.5**	**2,451,000**	Total	**103.5**	**1,427,000**	Total	**103.5**	**1,030,000**	Total	**103.5**	**1,097,000**

Existing Conditions Total

Parcel Size (Acres)	Building Area (Sq Ft)
148.7	**3,465,100**

SITE STANDARDS

The following standards are intended to guide redevelopment of the Tower Automotive site. They provide a general structure for organization of new development. The standards reflect the overall block pattern and site plans illustrated in the development concepts.

Industrial Parcels (I-1 : I-9)

Build-to-Line

For each parcel, build-to-lines, which represent the intended location of building facades are shown on the Site Standards Diagram. Two types of build-to-lines are present on the diagram: Primary and Secondary.

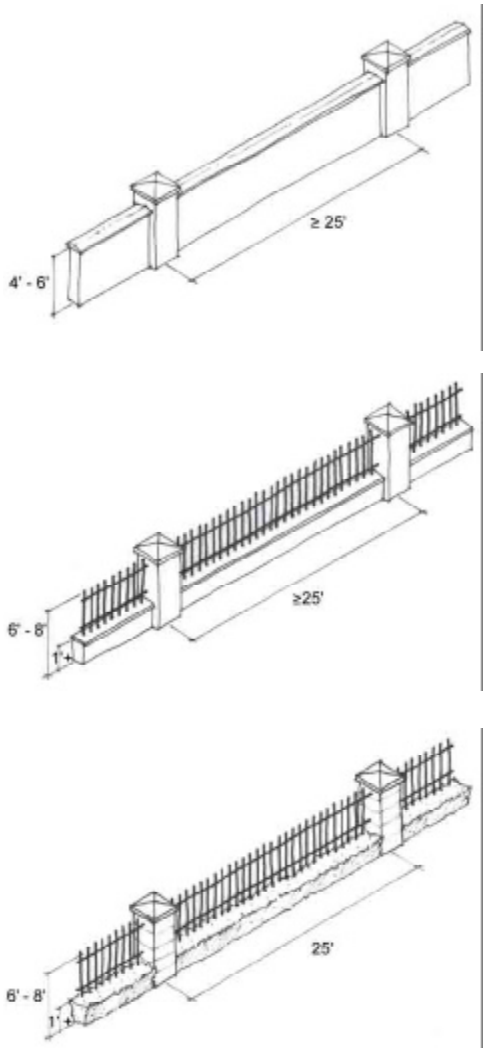
Building facade must occupy at least 25% of the total Primary build-to-line on each parcel. Building facade must also occupy at least 50% of *either* of the Secondary build-to-lines on each parcel.

Depending on the Site Concept that is followed for redevelopment of the site the Primary build-to-line varies along 35th and Hopkins Streets: Concept A – 45 feet from the property line; Concept B – 100 feet from the property line; and Concept C – 80 feet from the property line. Except where noted on the Site Standards Diagram, all other build-to-lines are setback 25 feet from the property line.

If multiple parcels are combined, then the outer perimeter of build-to-lines shall apply.

Garden Walls

Garden walls are intended to provide security for industrial sites and also a visually pleasing separation element between industrial property and the adjacent public right-of-way. Garden walls are required around the perimeter of every parcel between the public right-of way and off-street parking, loading, and service areas. They shall be located either between 15 and 20 feet from the property line or within 5 feet of the build-to- line and be continuous except as required for vehicular and pedestrian access, in which case the opening may be no greater than 24 feet.



Acceptable Garden Wall Options

Site Standards Diagram

Perimeter Landscaping

In addition to the required garden walls additional landscaping is required. All public streets require trees planted 50 feet on center between the sidewalk and curb. In addition, 35th and Hopkins Streets require an additional row of trees planted on the inside of the property line also 50 feet on center.

Facades

All facade orientations shall be treated as equally important to the public view. Layering of facades or other special features should be incorporated to define entrance areas, corners, or connections to public areas.

Visual access to either active building interior or display cases must be maintained on facades along build-to-lines. 25% of the area between 3 feet and 8 feet above the ground must be maintained as clear glass.

Buildings facades shall express a base, middle, and a top. The base anchors the building to the ground and is the interface between the building and people. The base of the building shall be highly articulated. The transition between the middle of the building and the base and top shall be articulated by use of contrasting materials, window openings, or ornamental elements. These horizontal bands form expression lines that give scale and character to a facade. The top terminates the building against the sky and provides an opportunity to create an interesting silhouette.

The following materials are prohibited: plain concrete, unpainted concrete block, corrugated metal building skins, plywood, and wood panel composite siding.

Service Areas

Service, loading, delivery, and waste disposal areas shall be located in the rear of buildings and can be visible but shall be shall be separated from public rights-of-way by garden walls.

Off-Street Parking

Parking lots shall be located behind build-to-lines, have a simple geometric shape, and strong edges that define them including garden walls, landscaping, and lighting. Exception: Concept C allows a row of parking in front of the build-to-line along 35th and Hopkins Streets.

Access

Access to the 35th Street, Townsend, and Hopkins Streets shall be limited to the identified block pattern. Driveways onto these streets are not permitted. Vehicular and pedestrian entrances into the area shall be designed as gateways with visually prominent features such as monument signage or landscaping. Facing driveways across a public street shall be located directly opposite each other whenever possible.

Business/Commercial Parcels (BC1 : BC2)

The following are general guidelines for development:

- Enhance the architectural character of the buildings through the use of natural materials and special features to define entrances, corners and links to other buildings and public places.

- Use buildings to form public places by emphasizing the shape of plazas and connecting to pedestrians with appropriately scaled design details and windows.

- Design off-street parking lots as public places through the use of simple geometric forms, strong edges, lot widths of less than 200', paving patterns, and separate pedestrian walkways.

- Establish visual edges along side yard property lines with landscaping and fencing.

- Design roadside entries as visually prominent gateways that have adjacent, but distinct vehicular and pedestrian entrances.

- Encourage uniform, attractive roadside signage that has a distinct base, middle and top with the content displayed in the middle portion.

- Create strong edges using landscape elements on major circulation routes that cross open areas on larger lots.

- Use light poles and other visual amenities to reinforce the design of public places.

- Encourage vehicular links between sites that contain off-street parking.

- Create continuous linkages designed for pedestrian movement and bike paths between sites.

- Facilitate future redevelopment with simple, orthogonal road patterns on larger lots.

- Make service areas attractive as components of public areas or visually separated from such areas through the use of fences and hedges.

- Link building interiors to the outdoors by promoting ground-level views into the building

- Allow for mixed-uses to create an active environment throughout the day

- Encourage outdoor activities and events including retail activities in the parking areas, seasonal events, temporary structures and outdoor eating and gathering spots.

Office/Institutional Parcel (OI-1)

The following are general guidelines for development:

- Maintain buildings 65 and 1A as they contribute greatly to an overall campus image and identity.

- New buildings should be sited in conjunction with buildings 65 and 1A to form a variety of usable public green space.

- Orient the fronts of buildings toward public green spaces.

- If developed instead as an industrial parcel, those standards should be followed. Primary build-to-lines should be located on Hopkins and 27th Streets and Secondary build-to-lines should be located on the east-west streets that surround the parcel.

Residential Parcels (R-1 : R-8)

The following are general guidelines for development:

- Design lots and buildings to form a single street edge with a uniform sight line, setbacks, and evenly spaced buildings. The buildings on each side of the street should collectively create a continuous alignment. This does not mean, however, that all projections or recesses from the front facade must be prohibited.

- Establish setbacks for new housing that respond to the existing setbacks on either side of, and across the street from new development. Setbacks should be measured from the property line and should not differ more than 5'-0" from adjacent setbacks.

- Garages shall not be the prominent feature along the street and shall have a recessed side entry or detached garage in the rear.

- Establish lot widths similar to surrounding sites. Create a symmetrical street cross-section and repetitive visual rhythm that reinforces the public space of the street and the perception of the street as a simple, unified public space.

- Create a strong visual order using parallel, rhythmic planting of shade trees and street lights.

- Maintain constant building heights on each edge of the street.

- Enforce criteria established for architectural materials, fenestration, roof pitches, and porches that match the character of the surrounding houses. Due to the variety of styles in the neighborhood these criteria will vary from project to project.

- Design corner lots such that the residential structure creates an effective facade along both streets and, if possible, use a garage or small residential structure to front the side street.

- Allow a mix of single-family and two-family residential development. Small-scale multi-family residential development should be allowed on arterial streets and near commercial uses.

INDUSTRIAL REDEVELOPMENT STRATEGIES

In any redevelopment strategy for the Tower Automotive Site, there are a number of buildings that would likely remain for at least the short-term. These buildings include:

- Buildings 35, 36, 38, 70, and 101 - Currently contain ongoing Tower Automotive operations.
- Building 115 - Serves as a utility hub for the entire site.
- Buildings 11, 11A, and 12 - Contain the compressor room, incinerator room, and the boiler room.
- Buildings 53, 56, and 56A - Contain electrical substations
- Buildings 108 and 114 - Building 108 is especially significant in terms of the architecture and exterior quality. The tall central bay (80+ feet in height) is very unique and could be valuable to the right manufacturer. Building 114 has been recently upgraded including finished office space.
- Buildings 1A and 65 - Contain finished office space and contribute greatly to a campus atmosphere for either business or institutional uses.

Based on the above information, the *Industrial Redevelopment Strategies* diagram on the following page shows three areas of varied sizes where focused redevelopment of the site may immediately occur assuming that complete clearance of the site would not happen.

Redevelopment Area 1A

This area is approximately 8 acres. This would be a logical starting point for redevelopment that could coincide and benefit from any new commercial uses to the north on Capitol Drive. The site is relatively small, and land clearance would be minimal.

Redevelopment Area 1B

This area is approximately 20 acres. It is a large area that could accommodate multiple new industrial buildings and could greatly improve the aesthetic quality of 35th Street along with any new residential that may occur on the west side.

Redevelopment Area 2

This area is approximately 40 acres. The thinner dashed lines within the area represent buildings that may or may not be demolished due to cost and logistic considerations. Aside from buildings mentioned above, Building 1 contains a major steam line that would need to be rerouted. Redevelopment of this area should happen in conjunction with the reuse of buildings 1A and 65 to strengthen the value and identity of the immediate area.

Industrial Redevelopment Strategies